

Product datasheet for **MC222694**

Erap1 (NM_030711) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Erap1 (NM_030711) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Erap1
Synonyms:	Arts1; ERAAP; PILSA; PILSAP
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



[View online »](#)

Fully Sequenced ORF:

>MC222694 representing NM_030711

Red=Cloning site Blue=ORF Orange=Stop codon

 TTTTGAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGCCCTCTTCTTCCCCTAGTATTGACATTTTTATCTGTGTCATCTCCTTCTTGGTGTGACAACAGTG
 ATATAGAATCTCTAAAAGCTAGTAATGGAGACTCATTCCCTTGGAAATAATATGCGACTTCCTGAGTATAT
 GACCCCGATTCTTATGATCTCATGATCCATGCAAACCTCAGCACTCTGACTTTCTGGGGAAAAACAGAA
 GTAGAAATCATAGCTAGCCGGCCACCAGCACCATTATTATGCATAGTACCACCTGCAAATATCTAAGG
 CCACCCTCAGAAGAGGAGCTGGAGAGATGCTGTCTGAAGAACCACTGAAGGTCTGGAATATCCTGCTCA
 TGAGCAAGTTGCACTGCTGGCTGCCAGCCGCTTCTTGTGGTCCCTGTACACAGTTATCATCGACTAT
 GCTGCCAACCTGTCTGAGAGTTCCATGGATTCTATAAGAGCACCTACAGAACACAGGAAGTGAATGA
 GAATACTTGCAAGCACAGTTTGAACCCACAGCTGCTAGAATGGCTTTCCCTGCTTTGATGAACCTGC
 CCTCAAGCAAGTTTTTCCATCAAGATAAAGAGGGATCCAAGGCACCTGGCCATCTCCAACATGCCCTG
 GTGAAATCTGTGAATGTTGCTGAAGGACTCATAGAAGACCATTTTGACATCACTGTGAAGATGAGTACCT
 ACCTAGTGGCCTTCATCATTTCTGATTTAAGTCTGTGAGCAAGATGACTAAGAGTGGAGTCAAGGTTTC
 TGTGTATGCTGTGCCAGACAAGATAAATCAAGCCGATTATGCTCTGGATGCTGCAGTGACTCTTCTAGAG
 TTTTATGAGGATTATTTCAACATTCATATCCTTTACCCAAGCAAGATCTTGCTGCAATCCCAGACTTTC
 AGTCTGGTGTATGGAAGGACTGGGGACTGACCACATACAGAGAGTCTCTCTGTTATACGATAAAGAAAA
 GTCTTCTGCATCTAGTAAGCTTGGCATCACAATGATTGTGTCCCATGAACTGGCTCACCAGTGGTTCCGG
 AACCTGGTCAACATGGAATGGTGAATGACCTTTGGCTCAATGAAGGATTTGCCAAATTTATGGAGTTTG
 TGTCTGCACTGTGACCCATCCTGAACTAAAAGTTGAAGACTATTTCTTTGGCAAGTGTAAATGCAAT
 GGAAGTTGATGCATTAACCTCCTCTCACCTGTATCCACACCTGTGGAGAATCCTGCGCAGATTCGGGAG
 ATGTTTGTGATGTTTCTTATGAAAAGGAGCTTGTATTCTGAATATGCTAAGAGATTATCTGAGTGCAG
 ATACATTTAAAAGAGGAATTGTACAGTATCTCCAAAAGTATAGTTATAAAAAACAAAAAACGAGGACCT
 GTGGAATAGCATGATGCATATTTGCCCTACAGATGGCACACAAACAATGGATGGCTTCTGCTCTAGAAGC
 CAACACTCATCAACCTCACACTGGCGTCAGGAGGTTGTAGATGTAAGACCATGATGAACACATGGA
 CACTGCAGAAGGGCTTTCCTCTGATAACCATCACTGTGAGTGGCGGAATGTGCACATGAAGCAAGAACA
 CTACATGAAGGGTTCAGAACGCTTCCAGAGACTGGGTATTTGTGGCATGTTCCACTGACATTCATTACC
 AGCAAATCAGACTCAGTCCAGAGATTTTGTGTAAGACAAGACAGATGTGCTCATCTCCAGAAGCAG
 TGCAGTGGATCAAATTAACGTGGGAATGAATGGCTATTACATTTGTCATTACGCGGATGATGGATGGGC
 TTCTCTGAGTGGCCTTTTAAAAGAAGCGCACACAACAATCAGCAGTAATGATCGGGCAAGTCTCATCAAC
 AATGCATTTAGCTGGTCAAGTATGAAAAGTATCAATAGAAAAAGCCCTGGATTTAACCCGTACTTTGA
 AAAATGAAACTGAAATATGCCCATATTTCAAGCTTTGAATGAACTCATACCTATGTATAAGTTAATGGA
 GAAAAGAGATATGATTGAGGTGGAAGCTCAATTTAAGGACTTCTTCTCAAGTTGCTGAAGGACCTTATT
 GATAAGCAGACTTGGACAGATGAAGGCTCTGTCTCAGAGAGGATGCTCAGGAGCCAGCTCCTCCTCCTCG
 CATGTGTGCGCAATTATCAGCCCTGTGTGCAGAGGGCAGAGCGCTATTTCAAGAGTGAAGTCACTAA
 TGGAAACATGAGCATCCCTATTGATGTGACCTTGGCTGTGTTTGTGTCGGGGCCCAAAACACAGAAGGC
 TGGGATTTTCTTATAGTAAATATCAGTCTTCTTTGTCTAGTACTGAGAAAAGCCAAATGAATTTTCCC
 TCTGTACAAGCAAAGATCCAGAAAAACTTCAAGTGGCTTCTAGATCAAAGTTTTAAGGGAGAGATAATAAA
 AACTCAGGAATTTCCACATATTCTCACACTCATTGGCAGAAACCCAGTGGGTTATCCATTGGCCTGGAAG
 TTTCTGAGGGAAAATGGAATAAGCTTGTACAGAAATTTGAACCTGGCTCATCGTCCATAGCTCACATGG
 TAATGGGAACAACAGACCAGTTTTCCACCAGAGCACGCTTGAAGAGGTAAGGATTCTTCAGTTCCTT
 GAAAGAAAACGGTTCAGCTCCGTTGTGTTCAACAAACCATTGAGACCATTGAAGAAAACATACGATGG
 ATGGATAAGAATTTTGATAAAAATAAGACTGTGGCTGCAAAAAGAAAAGCCAGAGTTGCT**GTGA**

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites:

SgfI-MluI

ACCN:	NM_030711
Insert Size:	2793 bp
OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
Components:	The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).
Reconstitution Method:	<ol style="list-style-type: none">1. Centrifuge at 5,000xg for 5min.2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.3. Close the tube and incubate for 10 minutes at room temperature.4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.
RefSeq:	<u>NM_030711.4</u> , <u>NP_109636.1</u>
RefSeq Size:	4014 bp
RefSeq ORF:	2793 bp
Locus ID:	80898
UniProt ID:	<u>Q9EQH2</u>
Cytogenetics:	13 C1
Gene Summary:	Aminopeptidase that plays a central role in peptide trimming, a step required for the generation of most HLA class I-binding peptides. Peptide trimming is essential to customize longer precursor peptides to fit them to the correct length required for presentation on MHC class I molecules. Strongly prefers substrates 9-16 residues long. Rapidly degrades 13-mer to a 9-mer and then stops. Preferentially hydrolyzes the residue Leu and peptides with a hydrophobic C-terminus, while it has weak activity toward peptides with charged C-terminus. May play a role in the inactivation of peptide hormones. May be involved in the regulation of blood pressure through the inactivation of angiotensin II and/or the generation of bradykinin in the kidney (By similarity).[UniProtKB/Swiss-Prot Function]